

US EPA ARCHIVE DOCUMENT

112701  
SHAUGHNESSEY NO.

17  
REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 11/2/81 OUT 12/21/81

FILE OR REG. NO. 10182-LI

PETITION OR EXP. PERMIT NO. \_\_\_\_\_

DATE OF SUBMISSION 9/10/81

DATE RECEIVED BY HED 10/29/81

RD REQUESTED COMPLETION DATE 1/9/82

EEB ESTIMATED COMPLETION DATE \_\_\_\_\_

RD ACTION CODE/TYPE OF REVIEW 170/Old Chemical -- Me Too

TYPE PRODUCT(S): I, D, H, F, N, R, S Rodenticide

DATA ACCESSION NO(S). \_\_\_\_\_

PRODUCT MANAGER NO. W. Miller (16)

PRODUCT NAME(S) Valid Rodenticide Bait-Pack

COMPANY NAME ICI Americas, Inc.

SUBMISSION PURPOSE Proposed Conditional Registration of Microtus

Control in Fruit and Nut Orchards

SHAUGHNESSEY NO.	CHEMICAL, & FORMULATION	Z A.I.
<u>112701</u>	<u>Brodifacoum</u>	<u>0.001%</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Brodifacoum**


**100.0. Pesticide Use**

Valid is a single dose anticoagulant containing 10 ppm brodifacoum for use on orchard rodents of the genus Microtus.


**101-106. See Previous Reviews**

**107 Conclusions**

EEB cannot at this time complete a hazard assessment. Since there are studies in progress that directly affect this Registration submission, we would be negligent in ignoring this new data when it is available. Further, the field studies that are in progress may indicate the need for more field testing. Since RD has asked us to answer the question "Is the data Referenced enough to Register this use?", we can only say that we do not have enough data to complete a hazard assessment. This hazard assessment is necessary for the Agency to complete a formal Section 7 Consultation with the Office of Endangered Species (OES). From informal consultations with OES, there appears to be numerous endangered and/or threatened species at risk with the orchard use of this product.

  
Russel T. Farringer, III  
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12/22/81

  
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12/22/81

  
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12/22/81

DATA EVALUATION RECORD

1. CHEMICAL: Brodifacoum
2. FORMULATION: 10 ppm Brodifacoum pellets
3. CITATION: Volid™: Efficacy to Meadow Voles And Wildlife Hazard From Broadcast Application of 10ppm Pellets at 20.4 lb/A (22.8 kg/ha) in a Dormant Apple Orchard (Virginia) June 2, 1981, Report Series TMUD 3683/B. Acc#. 245924
4. REVIEWED BY: Russel Faringer  
Wildlife Biologist  
EEB/HED
5. DATE REVIEWED: 12/21/81
6. TEST TYPE: Field Test - Wildlife Hazard
  - A. Test Species: - NA -
7. REPORTED RESULTS: Regarding observations of toxicity to nontarget organisms, two cottontail rabbits, two juncos, one shrew, one deer mouse, and one screech owl were found dead in the orchard after treatment; and one rabbit was collected in moribund condition. About 90 voles were found dead or trapped at intervals before and after treatment. For residue results in voles and nontarget animals, see also TMU0660/B.

Owl castings were collected from roosts and nests in the vicinity of the orchard, and prey items determined from skeletal remains. About 66% of pellets with identifiable fragments contained Microtus and 33% contained shrew remains. Six screech owls were captured and fitted with radiotransmitters. Movement data and roost locations from three of these owls are presented. A barn owl and kestrel were also transmitted and tracked. Contact with some radioed birds was lost before the study was concluded. Of all birds tracked, one (a screech owl) was found dead after treatment. However, death could not be positively attributed to brodifacoum. Two other radioed screech owls were collected at the conclusion of the study and appeared outwardly healthy. Movement data suggested the time spent in the treated orchard by tagged raptors was limited in comparison with time spent in surrounding untreated habitats.

## 8. REVIEWER'S CONCLUSION

Since the majority of this study is concerned with efficacy to the voles, the actual Research for primary and secondary hazard appears minimal. EEB partially agrees with the statement "It was concluded that the orchard use of BFC can result in a contamination of at least part of the screech owl population but the true extent and significance of this contamination for the owl population is still unknown." Due to the Researcher's own admission of limited night tracking of birds, limited number of birds and size of area the "true extent" of the problem has not been addressed.

### Reviewer's Conclusion

Category: Marginally supplemental toward a limited no value as far as registration action

Rationale: The Registrants' own questioning of the value of the study and the Researcher's low effort to study the hazard question.

Repairability: None

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